

MINUTES OF THE
MARICOPA ASSOCIATION OF GOVERNMENTS
SOLID WASTE ADVISORY COMMITTEE MEETING

Thursday, November 7, 2013
MAG Office Building
Phoenix, Arizona

MEMBERS ATTENDING

Christine Smith, Phoenix, Chair	Richard Allen, Salt River Pima-Maricopa Indian Community
* Cindy Blackmore, Avondale	Manuel Castillo, Scottsdale
John Minear, Buckeye	Charles Ramer, Surprise
# Traci Conaway for Sheree Sepulveda, Chandler	Charles Bladine, Tempe
* Robert Senita, El Mirage	* Helen Heiden, Arizona Chamber of Commerce and Industry
Jack Minkalis, Gilbert	Jaclyn Palermo for Robin Thomas, Arizona Department of Environmental Quality
Ernie Ruiz for Christina Betz, Glendale	* Jill Bernstein, Keep Arizona Beautiful
Willy Elizondo, Goodyear	Brian Kehoe, Maricopa County
* Chuck Ransom, Litchfield Park	# Wendy Crites, Salt River Project
Tara Acuna for Patrick Murphy, Mesa	Chris Coyle, Valley Forward
* Jerry Cooper, Paradise Valley	
Rhonda Humbles, Peoria	
Ramona Simpson, Queen Creek	

*Those members neither present nor represented by proxy.
#Attended by telephone conference call.

OTHERS PRESENT

Julie Hoffman, Maricopa Association of Governments	Adam Xia, Maricopa Association of Governments
Kara Johnson, Maricopa Association of Governments	Lora Mwaniki-Lyman, Maricopa Association of Governments
Audrey Skidmore, Maricopa Association of Governments	Larry Williams, United Fibers
Jason Stephens, Maricopa Association of Governments	Christian Delgado, Town of Queen Creek
	Willie Black, Waste Management
	Joslyn Marty, Town of Gilbert

1. Call to Order

A meeting of the MAG Solid Waste Advisory Committee (SWAC) was conducted on Thursday, November 7, 2013. Christine Smith, City of Phoenix, Chair, called the meeting to order at approximately 1:35 p.m. Traci Conaway, City of Chandler, and Wendy Crites, Salt River Project, attended the meeting via telephone conference call. Chair Smith encouraged Committee members to speak into the microphones so that the audience and teleconferencing members can hear.

2. Call to the Audience

Chair Smith provided an opportunity for members of the public to address the Committee on items not scheduled on the agenda that fall under the jurisdiction of MAG or items on the agenda for discussion, but not for action. She noted that according to the MAG public comment process, members of the audience who wish to speak are requested to fill out comment cards, which are available on the tables adjacent to the doorways inside the meeting room. Citizens are asked not to exceed a three minute time period for their comments. Chair Smith noted that no public comment cards had been received.

3. Approval of the June 20, 2013 Meeting Minutes

The Committee reviewed the minutes from the June 20, 2013 meeting. Richard Allen, Salt River Pima-Maricopa Indian Community, moved, and John Minear, Town of Buckeye, seconded and the motion to approve the June 20, 2013 meeting minutes carried unanimously.

5. Regional Solid Waste Management Statistics

Julie Hoffman, Maricopa Association of Governments, briefed the Committee on the regional solid waste management statistics. She indicated that when the Committee was reconvened in 2012, the members participated in a survey to identify areas of interest. One of the areas identified was updating the solid waste management statistics included in the 2005 MAG Regional Solid Waste Management Plan. Ms. Hoffman stated that the Committee reviewed draft tables in previous meetings and provided comments on the data to be collected. On April 2, 2013, a memorandum was distributed to members of the MAG Management Committee requesting updated regional solid waste and recycling information. The private sector was also contracted to provide updates on facilities in the region. Ms. Hoffman noted that the updated data was compiled and redistributed to members of the MAG Management Committee on October 8, 2013 for a second review. The final solid waste management data, with the updates included from the second review, were provided at each place.

Ms. Hoffman reviewed the final solid waste management data collected. The first table is the Residential and Commercial Breakdown of Solid Waste Generation. Ms. Hoffman noted that 17 MAG member agencies provided solid waste generation information. She indicated that a regional average for residential and commercial solid waste generation was applied for areas that did not have data readily available. The total amount of solid waste generated in the region for 2012 was approximately 2.25 million tons. Ms. Hoffman commented that the Solid Waste Management Facilities Summary, includes details on facilities such as: landfills, transfer stations, materials recovery facilities, construction and demolition debris landfills, composting facilities, medical waste, household hazardous waste, and waste tire collection sites. The third table at each place is the MAG Member Agency Solid Waste Management Programs. Ms. Hoffman indicated that two categories were added to this table from previous data collection efforts: green waste collection and plastic bag recycling. Ms. Hoffman stated that this table displays an increase in recycling programs in the region as compared to that last data collection effort. She commented that the first three tables were based off of information previously collected, however the Committee was also interested in collecting recycling information. Ms. Hoffman discussed that many communities provided details on recycling tonnages collected by category, which is included in the fourth table. She noted that for some communities, this data is more of a challenge to obtain. In some instances, only commingled data was available. This table provided a total recycling material collected per commodity, as well as, a recycled municipal solid waste 2012 total of approximately 327,000 tons for the 20 communities

reporting. The 2012 recycled municipal solid waste total that includes construction and demolition debris for the 20 communities was approximately 356,000 tons. Ms. Hoffman stated that the last table, Solid Waste Rates and Services, includes the monthly rate and the services provided by the communities. She noted that this table demonstrates the wide variety in programs to meet the needs of residents. Ms. Hoffman discussed that the tables were created to provide a regional perspective of current solid waste conditions in the region. She thanked everyone for their participation in the data collection effort.

Chair Smith thanked the member agencies for taking the time to participate in the data collection. She indicated that as compared to the solid waste management statistics from 2002, the updated data tables provide a good overview of what is happening in communities and the regional solid waste industry.

Charles Ramer, City of Surprise, noted that the data was helpful to the City of Surprise during a recent City Council review of performance. He stated that the solid waste management statistics were timely, useful, and credible.

Chair Smith commented that an update to the solid waste management statistics was a goal of the Committee that was discovered early. She added that the updated information is very timely due to changes in the solid waste industry.

4. Holiday Recycling Videos

Ramona Simpson, Town of Queen Creek, provided an overview of the holiday recycling videos. She thanked everyone that participated in the recycling video group and the MAG staff. She also thanked Chair Smith for her support; the City of Chandler for the use of their studio; and everyone who participated in the videos.

Chair Smith stated that the goal was to create multiple video clips that can be played on community television stations and community websites. The holiday recycling videos aim to address press inquiries that recycling programs may receive during the holiday season, as well as, provide a united front for the recycling programs in the region. Chair Smith indicated that the Committee made the videos a priority since the holiday season is a peak time in the solid waste and recycling industry.

Ms. Simpson added that the videos will be available in formats for television, websites, and social media. She announced that the Valleywide Recycling Partnership has released a video on cardboard recycling that can also be utilized in conjunction with the holiday recycling videos.

Ms. Hoffman asked that the Committee contact MAG staff if there are any concerns with the videos; minor changes may still be made. She stated that the goal is to have the videos available for America Recycles Day, November 15th.

Chair Smith reported that the intent of the videos is to cover a range of topics applicable to the whole holiday season from America Recycles Day to New Year's Day. The six holiday recycling videos were played to the Committee. The videos topics included: dinnerware, gift wrap, greeting cards, foam packaging, cardboard, and plastic bags. Chair Smith thanked everyone who contributed to the holiday recycling videos.

Ms. Hoffman discussed that the videos can be provided individually and/or as one compiled video. The videos are each 30 seconds and designed so that they can be combined for different television time

slots. Ms. Hoffman mentioned that the MAG member agencies logos with the MAG logo will be added at the end of the compiled holiday recycling video. She thanked everyone who helped with the videos: the City of Chandler for use of their studio for three consecutive days; the City of Phoenix for access to their facilities for footage; everyone who participated in the videos; and the Committee.

Chair Smith stated that many of the community recycling programs are different and accept a variety of materials which was a challenge when discussing regional videos. Chair Smith indicated that the videos can be placed in any order the communities need. Ms. Hoffman asked if the Committee had any comments on the order in which the videos would be listed on the compiled video. None were noted.

Brian Kehoe, Maricopa County, inquired about holiday tree recycling. Chair Smith replied that many communities have holiday tree recycling services. She mentioned that the videos can be marketed to direct residents to community websites where they can find information on recycling services, like holiday tree recycling. Ms. Simpson indicated that narrowing down holiday recycling topics was challenging because there are many different topics that could have been chosen. She stated that these videos can be used for many years to create interest in residents to both recycle and visit their community recycling webpage.

Chair Smith indicated that the videos have been well received and may be presented to the MAG Regional Council. She reminded the Committee to alert their management and staff on the press release that MAG will be releasing for the videos.

6. Green Waste Discussion

Ms. Simpson discussed that green waste is a challenge for many communities in this region. She noted that Queen Creek is evaluating how to increase diversion and reduce waste headed to the landfill. She added that Queen Creek has found that green waste is a large component of solid waste, as well as, bulk waste. Ms. Simpson discussed that Queen Creek participated in a pilot green waste program and that many communities in the region have or are participating in pilot programs. She reported that there is a four step process for green waste: public education/outreach, collection, processing, and the end market. Ms. Simpson explained that most communities can coordinate the first three steps of that process, however the challenge of green waste is the end market. She inquired if other communities have experienced the same challenges with establishing green waste programs or expanding green waste programs.

Ms. Simpson reported on the green waste pilot in Queen Creek. She indicated that initially the processed, composted green waste was to be used by a farmer in his fields. However, the farmer did not use the green waste product because, after speaking with other farmers, felt the product lacked nutritional benefit for the crops; manure was used instead. Ms. Simpson stated that she then met with the head scientist at the University of Arizona Maricopa Agricultural Center to discuss studying green waste product for agricultural purposes and if it could be a viable large land applied product. Ms. Simpson inquired if communities in the region are interested in exploring and studying green waste diversion opportunities. She added that this is an idea that could be pursued. Ms. Simpson mentioned the need to find an end market for green waste. She stated that the Committee could also explore new processes for green waste if there is an interest.

Willy Elizondo, City of Goodyear, replied that Goodyear is interested in a regional discussion of green waste. He indicated that Goodyear is looking into a green waste program since a significant

amount of its bulk waste is green waste. Mr. Elizondo mentioned that Goodyear did participate in a pilot green waste program that involved a local farm, however the pilot has ended. The City is now looking for other opportunities. Chair Smith asked the outcome of the Goodyear green waste pilot. Mr. Elizondo responded that the farm was very specific on the green waste accepted to be used on the land.

Chris Coyle, Valley Forward, stated that green waste is an issue across the region. He indicated that Republic Services has been approached by customers on green waste end markets. Mr. Coyle commented that green waste can be collected and processed, however there are very few viable options for green waste end markets. He noted that the quality material is already being processed into a product for a limited end market through a company called Gro-Well. Mr. Coyle added that until there is an out source that can accommodate large quantities of green waste, it will be a challenge. He mentioned projects that aim to use green waste for energy creation or gasification, however there are challenges with these projects as well. Mr. Coyle stated that this is an issue in most communities since green waste can be 20 to 30 percent of total waste tonnage generated annually. He noted that the green waste stream is not stable in the region due to the climate. Creating sustainable avenues for green waste in diversion programs is a challenge.

John Minear, Town of Buckeye, inquired about using green waste products for dust suppression on dirt roads. He mentioned composting is a critical part of diversion because green waste is a large component of the waste stream.

Mr. Coyle asked if California has any ideas for processing green waste that could work in our region. He mentioned a green waste processor in Coachella Valley, California which has a similar climate. Mr. Coyle mentioned investigating California programs.

Jaelyn Palermo, Arizona Department of Environmental Quality, responded to Mr. Minear that she was unsure of toxicity studies that would be applicable. She mentioned that using green waste as a dust suppression method may be problematic for air quality. Ms. Palermo replied that she would get back with Mr. Minear and the Committee about green waste as a dust suppressant.

Mr. Ramer reported that wood chips are used on dirt roads in other parts of the United States. He noted that wood chips are often used for navigability, as opposed to a dust suppressant. Mr. Ramer added that one important thing about windrow composting is to ensure that weed seeds are killed. He mentioned the cogeneration system at the Northwest Regional Landfill which relies on methane gas. Mr. Ramer inquired how green waste affects cogeneration systems. Mr. Coyle replied that introducing organics, that decompose, into landfills in an arid climate will produce better methane gas as compared to not introducing organics. He mentioned that it may be a solution, but making changes to a landfill beyond original intention may require additional regulatory approval. Mr. Ramer responded that credit may be given for recovery from a cogeneration system at a landfill.

Mr. Allen stated that Salt River Landfill has operated a green waste program for over 15 years, as well as, operating a landfill gas-to-energy system. He reported gas levels of 55 percent methane since a majority of the waste stream is residential solid waste.

Chair Smith discussed that the City of Phoenix has looked at using green waste product for use on streets and dirt lots. The challenges faced included the fact that the material becomes more fine which can create air quality issues. In addition, the material moves, which can clog storm drains. Chair Smith added that chips from green waste has been used on lots and landfills; however, it never really goes to the next stage of composting, especially when applied to the top. She mentioned using

green waste material at the mulch stage on golf courses and parks, however this is a challenge due to other competitive, efficient systems. Chair Smith stated that the City of Phoenix has some green waste pilot programs, however large volume end markets are still an issue. She commented that new markets have to be created that do not exist in the region if green waste is to be addressed on a regional scale. Chair Smith indicated that California has been successful in creating end markets due to mandates and the high cost of landfilling in California which is quite different from our region. She commented that in some states the Department of Transportation is mandated for city projects to apply a certain amount of compost in their projects. There are projects in green waste that the Committee, the region, and possibly the State could explore. She noted that the region has a higher level of toxicity in vegetation as compared to other states, this is a challenge for high volume green waste products as well. Chair Smith stated that another challenge regarding green waste is the economics.

Charles Bladine, City of Tempe, discussed that the City of Tempe has partnered with Singh Farms to compost green waste. The City then purchases the compost for use on ball fields and golf courses. He noted that it is labor intensive and not sustainable unless long-term budget capital programs are in place. Tempe recently began a program where green waste is separated during bulk pickups to be composted at City yards for use in City projects. Mr. Bladine indicated that the challenges with this method include space, economics, and the time intensive nature of the program. He stated that green waste has been an issue for the region for many years and it is a timely issue due to diversion goals. The City of Tempe, City of Mesa, and the Town of Gilbert are currently reviewing regional disposal contract bids that have green waste components. Mr. Bladine stated that more information should be available in the next few weeks and that he is interested in the continuation of a regional discussion on green waste.

Mr. Minear inquired if green waste has been used as a blending agent for sewage sludge. Mr. Allen replied that no additional processing is done at their site, except for the addition of water. Once the material has been filtered through screens, the material is transported to the Gro-Well site for final processing. Mr. Allen indicated that many communities that produce a large amount of sewage sludge work with farmers on land application. He discussed that the Salt River Landfill only accepts a small amount of sewage sludge due to odor issues. Chair Smith added that the City of Phoenix landfill only accepts a certain amount of sewage sludge as well, which must be dried to a certain percentage. The remaining sewage sludge generated is land applied. Chair Smith indicated that she has heard of colocated plants utilizing green waste as a blending agent, however not in the region. Mr. Allen commented that the Salt River Landfill does accept a large amount of drinking water sludge, which is a lot different than sewage sludge. He commented that the landfill has explored utilizing drinking water sludge, however this type of sludge does not contain many nutrients, therefore, there was no interest in using it for that purpose.

Chair Smith discussed another challenge with regard to green waste. Due to the amount of fires, Maricopa County is looking into regulations for composting facilities. Fire departments are also revisiting requirements for these facilities. Chair Smith stated that this may present another challenge for green waste.

Ms. Simpson indicated that city haulers have expressed challenges with regard to the location of facilities and therefore the transportation to these facilities. The costs for transporting materials cuts out profit margins. Ms. Simpson stated that the University of Arizona Maricopa Agricultural Center is very involved with farmers in the State and in tune with their needs. Ms. Simpson indicated that she spoke with the Agricultural Center on the cost of experimentation and field studies, in addition to developing a product the farmers would need for large land application. The agriculture industry

would want to see findings from large acreage studies on crops that are applicable to the region. Ms. Simpson discussed that studies on green waste products in agriculture are necessary to create an end market in local agriculture for green waste. She mentioned the potential for placeholders in City budgets for regional studies next year on the topic of green waste.

Chair Smith thanked the Committee for the discussion. She encouraged communities that are interested in green waste to work together and with MAG on opportunities for addressing green waste including funding options for potential regional projects.

7. Solid Waste Advisory Committee Activities and Next Steps

Chair Smith reviewed Committee activities and next steps for the Committee. She stated that the Committee chair will change in January 2014.

Ms. Hoffman provided an overview of Committee activities for the past two years. In February 2012, the Committee was reconvened at the request of members of the MAG Management Committee to share ideas on best practices and discuss other solid waste matters in the region. A survey was completed by the Committee and found areas of interest that the Committee has pursued over the last two years. Committee meetings have included presentations on best practices, the Arizona Department of Environmental Quality Solid Waste Program, the Valleywide Recycling Partnership regional efforts, as well as, updates on various programs throughout the region. To compile program information from around the region, the Solid Waste Best Practices in the MAG Region report was completed in 2012. The best practices document was well received by the MAG Management Committee and the MAG Regional Council. Ms. Hoffman indicated that the Committee also expressed interest in solid waste projects in other parts of the country; the Committee heard presentations on the Southern California Conversion Technology Demonstration Project and the City of Austin Zero Waste Initiative. The update to the Regional Solid Waste Management Statistics and production of Holiday Recycling Videos are other accomplishments of the Committee. She discussed that the Committee has also participated in East Valley/West Valley discussion groups. She thanked the Committee for their participation in all of these activities.

Chair Smith inquired about ideas for the Committee going into the future. She noted that the Committee disbanded years ago due to lack of discussion. Chair Smith indicated that it is important to continue discussion of regional needs and encourage leadership involvement. She provided an opportunity for Committee members to share ideas for discussion.

Mr. Allen responded that he has interest in disposal of electronic waste. He stated there has been a sharp increase in costs to dispose of cathode ray tube (CRT) televisions. In many cases, CRT televisions are shipped out of state to be incinerated. Mr. Allen mentioned discussion on the disposal and costs for electronic waste disposal programs.

Mr. Ramer mentioned discussion on household hazardous waste (HHW) regional efforts. He commented that the costs of HHW programs are increasing and becoming a large ticket budget item. Mr. Ramer also commented that the Surprise City Council is interested in a same day trash and recycling program. He stated that he is interested in how same day collection impacts customer service, savings, and if there are any lessons learned.

Mr. Coyle added that he is interested in HHW as well. He noted that Republic Services recently coordinated a HHW event for Anthem. Mr. Coyle commented that the one day collection, for four hours, was approximately \$15,000. He added that he is interested in hearing more about

commercial, industrial, and roll off waste streams. Mr. Coyle inquired about the recycling rates that occur outside of residential solid waste and making commercial and industrial waste part of the successful 40 percent diversion by the year 2020 goal that the City of Phoenix is pursuing.

Mr. Kehoe asked if the Salt River Landfill charges to dispose of CRT televisions. Mr. Allen replied that the Salt River Landfill does not currently charge for disposal of CRT televisions; however, the price for electronic waste was recently increased. He mentioned that options are being explored. Mr. Kehoe mentioned that it is a challenge for the County as well. He stated that the County had approached Goodwill about partnering for CRT television disposal, however Goodwill is saturated with the same type of waste. Mr. Allen commented that approximately 80 percent are CRT.

Ms. Hoffman stated that when the Solid Waste Best Practices in the MAG Region was presented to the MAG Regional Council, a follow up to the report was requested. She explained that the collection of information on any new programs in the region as a result of the best practices report may be a future activity.

Mr. Allen inquired about a City of Phoenix third barrel. Chair Smith responded that the City has a pilot underway and that the third barrel is currently going through the Council approval process. The Council is still working on the details of the third barrel.

Ernie Ruiz, City of Glendale, discussed the Vieste Project in Glendale. He stated that the Vieste Project can potentially be an application for green waste as discussed earlier. Mr. Ruiz commented that the project is currently being constructed and the dirty Materials Recovery Facility (MRF) should be in operation in April 2014. Phase I will create approximately 50 jobs and divert approximately 180,000 tons annually. Initially, about two thirds will come back to be landfilled. The end goal of the waste-to-energy project is to absorb the full 180,000 tons from the landfill for waste-to-energy. Mr. Ruiz stated that the City of Glendale is looking forward to the Vieste Project kick off. Chair Smith asked about the City of Glendale recycling lines. Mr. Ruiz replied that the current recycling lines will continue to go to the operational MRF. He indicated that this project will strictly work with refuse, mainly municipal solid waste and green waste. Mr. Ruiz mentioned that the City is looking into accepting biosolids and ways to divert biosolids from the landfill.

Chair Smith stated that in addition to electronics, HHW, and green waste, she would be interested in discussing end markets for these waste streams. She mentioned working with economic development leaders to focus on end markets for these waste streams. Chair Smith mentioned that it is important to look into local end markets for sustainable communities and job creation.

Ms. Simpson mentioned other waste stream end markets that can be developed. She reported that Queen Creek had a curbside textile recycling pilot that has been highly successful. Ms. Simpson indicated that Queen Creek would like to make this part of the recycling program, however end markets have to be established. She mentioned that California has many recycling end markets that have been created by mandate. Ms. Simpson discussed creating end markets voluntarily through regional collaboration.

8. Call for Future Agenda Items

Chair Smith provided the opportunity for Committee members to suggest future agenda items. Mr. Ruiz commented on an opportunity to discuss partnering with the City of Phoenix on their 40 by 20 goal. Chair Smith responded that she will bring this request forward to the City. She stated that the

intent of the 40 by 20 project is to be a regional effort in the long-term if there is interest from other communities. An update of the City of Phoenix 40 by 20 will be given in 2014.

9. Comments from the Committee

Chair Smith asked for any comments from the Committee. She mentioned the state-wide Go Green Conference at the Phoenix Convention Center on December 3, 2013 that will address items discussed by the Committee, as well as, water and air quality. With no further comments, Chair Smith thanked the Committee for participating and called for adjournment of the meeting at approximately 2:50 p.m.